

### REMARKS

In the Office Action dated July 15, 2002, claims 1, 5, 7, and 12 are rejected under 35 USC §102(b). Claims 2, 4, 6, and 8-11 are rejected under 35 USC §103(a). Claims 1-12 are rejected under the Doctrine of Obviousness-Type Double Patenting.

By this amendment, claim 1 has been amended to more specifically define the features of Applicant's invention. For the reasons set forth hereafter, it is respectfully submitted that Applicant's invention as set forth in claim 1, as well as claims 2-12 depending therefrom, includes features which are not anticipated or rendered obvious by the cited references, taken singly or in any permissible combination. Reconsideration is, therefore, respectfully requested.

Claims 1, 7, and 12 are rejected under 35 USC §102(b) as being anticipated by Lo.

Lo specifically teaches the use of a polyurethane foam core 12 inside the shaft. Thus, the interior of the shaft is not hollow or void of material. Even though foam can be lightweight, it nevertheless adds weight to the shaft.

Since Applicant's invention as set forth in claim 1 specifically defines a hollow, void bore which is not taught by Lo, it is respectfully submitted that Lo does anticipate Applicant's invention as set forth in claim 1, or claim 7 and 12 which depend therefrom.

Claim 5 is rejected under 35 USC §102(b) as being anticipated by Barrows.

Barrows specifically teaches a shouldered plug "e" which fits inside the wood tube. The shouldered plug is inserted into a tube mounted in a hollow bore extending through the shaft. Barrows specifically teaches that any desired balance of the cue may be obtained by proportioning the weight of the tube to the wood removed from the center of the tube. When a heavier tube is used, the forward end of the cue will be heavier, while the opposite result is obtained with a lighter tube. Thus, Barrows specifically adds a tube and a shouldered plug at the tip end of the tube and shaft the bore in the shaft. This teaches away from a hollow void bore as set forth by the Applicant in claim 1, from which claim 5 depends.

Further, regardless of the weight of the tube used in Barrows, the shouldered plug will add weight to the tip end of the cue in a manner directly opposed to the reduction of the mass of the tip end of the cue to minimize cue ball deflection on impact with the cue by Applicant in claim 5.

For these reasons, it is respectfully submitted that Applicant's invention as set forth in claim 5 patentably defines over Barrows and is not anticipated thereby.

Claims 2, 4, 8 and 10 are rejected under 35 USC §103(a) as being obvious over Lo. The Examiner specifically notes that Lo is devoid of any teaching of the specified wall thickness set forth in claim 2. The Examiner, however, contends that, absent unexpected results, the exact thickness of Lo's wall would obviously have been up to the ordinary skilled artisan depending upon the strength and weight characteristics desired by the player. The Examiner contends that the thickness of Lo's wall must be selected to be of appropriate strength to compensate for the fact that the tip end of the cue is hollow.

Applicant has previously submitted arguments which, in Applicant's opinion, clearly define the unexpected results provided by Applicant's unique cue design wherein the mass of the tip end of the shaft is reduced to minimize cue ball deflection. This unexpected result is clearly lacking in Lo. While strength and weight are features of a cue, the general statement that any strength and weight characteristic can be selected as desired does not establish a *prima facie* case of obviousness of reduced mass in the tip end of a cue to minimize cue ball deflection. Without the impermissible use of hindsight reconstruction, the Examiner has no basis to read this feature of Applicant's invention into Lo's structure.

Further, Lo is devoid of any teaching of a specific wall thickness. While the Examiner is correct in noting that the wall thickness in Lo would be chosen to provide adequate strength to maintain the integrity of the cue shaft, it clearly is an impermissible and unsupported jump to extend the shaft of Lo to the specified wall thickness set forth by the Applicant in claim 2 which provides the desired tip mass reduction to minimize cue ball deflection and which is a feature completely unappreciated and lacking in Lo.

For these reasons, it is respectfully submitted that Applicant's invention as set forth in claims 2, 4, 8, and 10 includes features which are not rendered obvious by Lo.

Claims 6, 9, and 11 are rejected under 35 USC §103(a) as being unpatentable over Ghezzi, cited by the Examiner for the first time in the "final" Office Action.

The Examiner contends that the exact length of the bore would have been obvious to one of ordinary skill in the art depending upon the amount of length that one felt was necessary to properly retain the tip element. The Examiner further contends that the removal of material from the tip end will lighten that portion of the cue.

While Ghezzi shows a bore extending from the tip end, the purpose of the bore is to provide a space for a tip retention spring member. Thus, while the bore in Ghezzi will reduce the weight of the tip end of the shaft, Ghezzi then teaches the addition of a metal spring into the bore to retain the tip in the bore. This spring will add weight and may result in the tip of the shaft weighing more than a completely solid shaft without such a tip spring mount and bore.

With respect to all of the obviousness rejections raised by the Examiner based on Ghezzi, Applicant submits that the references which include a bore for whatever purpose in the tip end of the shaft or along the entire length of the shaft fail to appreciate the specific use of the bore or shaft wall thickness to achieve a reduction in the tip end mass of the shaft to minimize cue ball deflection. None of the references teach or suggest any tip mass reduction for reduced cue ball deflection. The references, on the other hand, are designed for cue balance and/or for a convenient means to removably mount a tip to the cue shaft.

Applicant has reduced the specific thickness to weight ratio of the shaft in manner directly opposed to the cited references. The Applicant has reduced the thickness of the shaft by about 10% and has decreased the weight of the tip end of the shaft by over 30%. This has resulted in a cue having minimized cue ball deflection.

Applicant's cue has achieved the unexpected results required by the Examiner in the Office Action as evidenced by the fact that a significant number, approaching 50%, of the top 40 ranked male professional pool/billiard players in the world are using Applicant's cue. These professionals are using Applicant's cue due solely to the performance edge it provides over competitive cues as these professionals have not received any compensation from the Applicant to use Applicant's cue.

Finally, claims 1-12 are rejected under the doctrine of obviousness-type double patenting over claims 1-9 of US Patent No. 6,110,051. The Examiner contends that although the conflicting claims are not identical, they are not patentably distinct because the removal of the additional claimed elements with corresponding loss of function would have been obvious to one of ordinary skill in the art.

It is submitted that the Examiner has not provided any basis for supporting the statement that removal of the additionally claims elements set forth in claim 1 assumed to the set forth in claim 1 of US Patent No. 6,110,051 would have been obvious to one of ordinary skill in the art. Rather, the Examiner has merely made a statement without support that the removal of the elements would have been obvious. The Examiner is requested to provide support for this obviousness rejection or withdraw it.

Claim 1 of the subject application lacks an element set forth in claim 1 of US Patent No. 6,110,051 thereby making claim 1 of the present application inherently patentably distinct from the cited patent.

It is also noted that the present application is a continuation of the application which matured into the 6,110,051 patent. Thus, the present application and the cited patent share the same inventor, priority filing date, and ownership.

For these reasons, withdrawal of the obviousness-type double patenting rejection is submitted to be warranted and is respectfully requested.

For the reasons set forth above, it is respectfully submitted that Applicant's invention set forth in claims 1-12 includes features which are not anticipated or rendered obvious by the cited references. Thus, it is submitted that

claims 1-12 are in condition for allowance; a notice of which is respectfully requested.

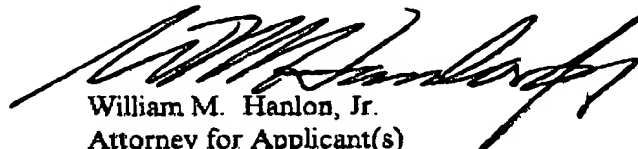
Entry of this amendment under the provisions of Rule 37 CFR § 1.116 is submitted to be warranted and is respectfully requested. By this amendment, a minor revision has been made to claim 1 to more specifically define a feature of Applicant's invention. It is submitted that this word addition does not constitute new subject matter or require undo consideration or a new search by the Examiner as the same word was added to the parent application, now cited by the Examiner as US Patent No. 6,110,051. Thus, the Examiner has already considered and reviewed a claim containing this feature.

Further, Applicant has amended claim 1 at this time as a result of rejections raised by the Examiner based on Ghezzi cited by the Examiner for the first time in the "final" Office Action. Finally, it is submitted that entry of this amendment clearly distinguishes Applicant's invention from the cited reference thereby placing all of the claims in condition for allowance.

Accordingly, entry of this amendment under the provisions of Rule 37 CFR 1.116 is submitted to be warranted and is respectfully requested.

Respectfully submitted,

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